Public Information on Low-Pathogenic Avian Influenza (LPAI)

AVIAN INFLUENZA AROUND THE WORLD

Avian influenza (AI) occurs around the world in many forms. Various strains can cause various kinds of illness in poultry or no symptoms at all. Chickens, turkeys, pheasants, quail, ducks, geese, and guinea fowl as well as exotic and wild birds can become infected. Migratory waterfowl are considered a natural reservoir for AI viruses.

At this time, in Rhode Island there is no immediate human health risk from avian influenza.

AI occurs in two forms, differing chiefly in the severity of disease it can cause. *Low pathogenic avian influenza* (LPAI) is the most common form and typically causes mild clinical signs in infected birds. Under normal field and farm conditions, some strains of LPAI may mutate genetically to the more hazardous form, *high pathogenic avian influenza* (HPAI). HPAI is extremely infectious and highly fatal disease in poultry flocks. Rarely, isolated strains of high pathogenic virus can cause illness in humans. The U.S. Department of Agriculture and state animal health officials are working constantly to prevent HPAI outbreaks in America's poultry industry.

Outbreaks of low or high pathogenic AI can result in national and international bans on poultry products. The economic impact can be devastating, with millions of dollars in lost trade, increased egg prices, and the death of millions of birds.

AI can develop rapidly in poultry operations, without any warning. An outbreak can become established and spread rapidly from farm to farm even before symptoms are noticeable. Constant surveillance and reporting of any disease in the poultry industry is essential in order to control the spread of AI. Testing for this disease is often required to import and export birds.

LOW PATHOGENIC AVIAN INFLUENZA AND RHODE ISLAND

In recent years LPAI has been detected occasionally in live bird markets and commercial flocks in the eastern United States. A particularly severe outbreak of LPAI occurred in Virginia during the summer of 2002, affecting 4.7 million birds. In February of 2003, LPAI was reported in a large commercial layer flock in Eastern Connecticut. State and Federal officials have instituted strict quarantine and surveillance procedures in order to contain the disease and identify infected flocks.

To date, Rhode Island has discovered LPAI infected birds in one commercial egg operation and one live bird market. Protocols have been implemented to prevent the disease from infecting other commercial and private flocks. Both the live bird market and the egg layer operation were first quarantined, then thoroughly disinfected and strict biosecurity and control measures put in place. Under regular monitoring by state officials, they remain free of LPAI. There have been no other cases of avian influenza reported, but State and Federal animal health staff continue to test all sick birds and commercial flocks in Rhode Island.

Although the potential for LPAI to mutate into the severe, high pathogenic form is extremely low, identification and quarantine of LPAI infected birds is essential in order to prevent the virus from establishing itself and multiplying. State law mandates the reporting of all avian influenza cases.

Rhode Island has approximately 60,000 birds in production and 30,000 birds in so-called "backyard" flocks, which includes farms with fewer than 500 birds and residences with poultry being raised for fairs, shows and exhibition. Commercial production facilities are at the highest risk for disease, due to the large numbers of birds in confined areas and the movement of potentially contaminated vehicles and materials between farms. Backyard flocks and small farms can also be infected, especially through contact with birds, vehicles, or materials from commercial operations.

CLINICAL SIGNS OF AVIAN INFLUENZA

Infected birds may exhibit no obvious signs of disease. Typically bird owners will notice one or more of the following symptoms (here listed in no specific order):

- Sudden death with no clinical signs
- Lack of appetite
- Listlessness
- Drop in egg production
- Soft-shelled and misshapen eggs
- Swelling of the head, comb, wattles, eyelids and legs
- Respiratory disease, sneezing, coughs, nasal discharge
- Neurological signs, in coordination
- Diarrhea

Bird owners should be alert and monitor flocks for any sign of illness. Veterinarians and Animal Health Officials should be contacted immediately when disease is suspected.

PREVENTING AVIAN INFLUENZA-BIOSECURITY MEASURES ON FARMS

Avian Influenza can be spread rapidly, primarily through contact with infected birds or contaminated manure, vehicles, and materials. Migrating waterfowl harboring the virus can expose domestic birds. Once introduced to a farm, AI moves easily among birds housed together. Mechanical transmission via contaminated manure, cages, feed, vehicles, egg crates and exposed humans represents the highest risk for spread of disease.

Avian Influenza virus can remain contagious for long periods in moist, moderate temperature environments, such as dirt and manure. Frozen virus can survive indefinitely. Fortunately heat, drying and most types of disinfectants will destroy AI. Thorough cleaning and washing of exposed materials, followed by complete application of disinfectants is effective for decontamination. Poultry owners should always practice strict "biosecurity" (protocols designed to prevent disease). Some recommendations for biosecurity are:

- Practice “all in-all out” management of birds, with cleaning between restocking.
- Thoroughly clean and disinfect all equipment and vehicles before entering and leaving farms.
- Maintain and isolate equipment on the farm – do not share materials or vehicles.
- Restrict traffic on the property to essential movements and personnel.
- Avoid contact with people who have been to other farms – minimize visitors.
- Do not visit other farms unless clothing has been changed.
- Provide proper clothing and disinfectants for all personnel.
- Minimize exposure to migratory and native birds.
- Follow strict protocols for permitting, health certification and isolation of new birds or eggs.

SURVEILLANCE AND REPORTING OF AVIAN INFLUENZA

Rhode Island animal health officials routinely screen commercial poultry operations for Avian Influenza and other diseases. All reports of sick birds and suspicious illness are investigated. Blood samples and viral cultures are collected from live and dead birds for testing at approved laboratories. Private veterinarians will examine birds and submit samples. All suspect cases must be reported immediately to the Rhode Island Department of Environmental Managements Division of Agriculture. The Animal Health Section of the RIDEM will continue surveillance throughout the state and report all results. Information and details are available at the addresses listed below.

Rhode Island Department of Environment Management
Division of Agriculture, Animal Health Section
235 Promenade Street, Providence, RI 02908
Phone: 401-222-2781 ext 4511
FAX: 401-222-2781

USDA-Animal Plant Health Inspection Service
Veterinary Services – New England Area
160 Worcester-Providence Rd.
Sutton, Massachusetts, 01590
Phone: 505-865-1421

RESOURCES AND INFORMATION

Further information and advice about avian influenza and pandemic influenza can be obtained through the national gateway at http://pandemicflu.gov/, the Rhode Island gateway at http://www.health.ri.gov/pandemicflu/index.php, and the national agricultural gateway at http://www.aphis.usda.gov/.